

CLAIMS

1. An improved cam assembly for comprising:

a cam lever head having a long travel face and a cam lever arm, said cam lever head including a cam axle for rotation thereabout by said cam lever arm and hold and release means cooperative with said cam axle for providing multiple locking positions of rotation of said cam lever arm; and

said cam axle including multiple indentations in said cam axle and said hold and release means including a hold and release pin and a spring whereby under pressure from said spring said hold and release pin forces a ball bearing into a selected one of said multiple indentations thereby locking said lever arm and upon depressing said hold and release pin against said spring said ball bearing is released thereby allowing further movement of said lever arm.

2. An improved quick release fastener for detachable mounting of a hollow wheel hub to the fork of a bicycle, the fastener comprising:

a cam assembly including a cam lever head having a long travel face and a lever arm;

a skewer shaft having a first end, a second end, and a longitudinal axis for insertion through said wheel hub;

an adjustable end nut on said first end of said skewer shaft outside said wheel hub and a profile washer on the other side of said wheel hub adjacent said second end of said skewer, said profile washer adapted for coaction with said long travel face of said cam lever head;

a first hub centering spring on said skewer shaft adjacent said adjustable end nut;

a second hub centering spring on said skewer shaft inward of said profile washer;

said cam lever head includes a cam axle for rotation thereabout by said cam lever arm and hold and release means cooperative with said cam axle for providing multiple locking positions of rotation of said cam lever arm;

said cam axle including multiple cavities and said hold and release means including a pin and a spring whereby said spring urges said pin to force a ball bearing into a selected one of said cavities thereby locking said lever arm and upon depressing said pin against said spring said ball bearing is released thereby allowing movement of said lever arm; and

wherein cooperative operation of said cam lever arm and said hold and release pin provides multiple locking positions for detachable mounting of said wheel hub to said fork.